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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,142	11/24/2003	Hooi Bin Lim	OSRMP2001-44-01	1141

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EXAMINER	
ERDEM, FAZLI	
ART UNIT	**PAPER NUMBER**
2826	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,142	LIM ET AL.	
	Examiner	Art Unit	
	Fazli Erdem	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/18/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503) further in view of Nagayama et al. (5,701,05)

Regarding claims 1 and 7, Nayagaya et al. in Figs 1, 2 and 4 disclose organic electroluminescent device where a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an active region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. ('187) fail to disclose the required electrode region and required configuration where the past ends of pillars extend past ends of the electrodes. However, Uemtasu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16. Furthermore, Nagayama et al. disclose an organic electroluminescent display panel and method for manufacturing the same where in Figs. 2 and 4, the past ends of the pillars extend past ends of the electrodes.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region and the required pillar/electrode relationship in Nagayama et al. ('187) as taught by Uematsu et al. and Nagayama et al. respectively, in order to have a light emitting device with increased performance.

3. Claims 2-6 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503) further in view of Roitman et al. (6,111,356) further in view of Nagayama et al. (5,701,055)

Regarding claims 2-6 and 16, Nagayama et al. in Figs 1, 2 and 4 disclose a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an electrode region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. ('187) fail to disclose the required electrode region, organic functional material dissolved in the solvent, the partition walls/pillars being inert to solvent and the required pillar/electrode relationship However, Uematsu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16. Furthermore, Roitman et al. in Figs 1-6 disclose a method to form an OLED device with tapered pillars 30 over a transparent substrate 12 coating the substrate 12 with a solution comprising an organic functional material dissolved in a solvent where the pillars 30 being inert to solvent. Finally, Nagayama et al. disclose an organic electroluminescent display panel

and method for manufacturing the same where in Figs. 2 and 4, the past ends of the pillars extend past ends of the electrodes.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region, functional material dissolved in a solvent and pillars being inert to solvent and the required pillar/electrode relationship in Nagayama et al. ('187) as taught by Uematsu et al., Roitman et al. and Nagayama et al. respectively, in order to have an organic electroluminescent device with higher performance.

4. Claims 8-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503) further in view of Roitman et al. (6,111,356) further in view of Wolk et al. (6,140,009) further in view of Nagayama et al. (5,701,055)

Regarding Claims 8, 9 and 10-15, Nagayama et al. in Figs 1, 2 and 4 disclose a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an electrode region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. ('187) fail to disclose the required electrode region, organic functional material dissolved in the solvent and the partition walls/pillars being inert to solvent, the required flexible substrate and the required pillar/electrode relationship. However, Uematsu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16. Roitman et al. in Figs 1-6 disclose a method to form an OLED device with

tapered pillars 30 over a transparent substrate 12 coating the substrate 12 with a solution comprising an organic functional material dissolved in a solvent where the pillars 30 being inert to solvent. Furthermore, Wolk et al. disclose a thermal transfer element for forming multilayer devices where in Fig. 1A, 102 is a flexible substrate. Finally, Nagayama et al. disclose an organic electroluminescent display panel and method for manufacturing the same where in Figs. 2 and 4, the past ends of the pillars extend past ends of the electrodes.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region, organic functional material, flexible substrate and the pillar electrode relationship in Nagayama et al. ('187) as taught by Uematsu et al., Wolk et al. and Nagayama et al. in order to have an organic light emitting device with higher reliability

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fazli Erdem whose telephone number is (571) 272-1914. The examiner can normally be reached on M - F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FE
May 30, 2005

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800